



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,929	08/25/2003	Paul K. Piontkowski		1610

7590 12/22/2004
DR. PAUL K. PIONTKOWSKI
2310 POPKINS LANE
ALEXANDRIA, VA 22306

EXAMINER

NGUYEN, THONG Q

ART UNIT PAPER NUMBER

2872

DATE MAILED: 12/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/646,929

Applicant(s)

PIONTKOWSKI, PAUL K.

Examiner

Thong Q Nguyen

Art Unit

2872

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 September 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 18 and 19 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-11, 20 and 21 is/are allowed.
- 6) ☒ Claim(s) 12-17, 22 and 23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 8/25/03 & 11/24/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. The present Office action is made in response to the Pre-amendment filed on 4/27/2004 and the Election filed on 9/30/2004.

It is noted that in the mentioned Pre-amendment, applicant has made amendments to the specification, the figure 3 and the claims. Regarding to the claims, applicant has renumbered the claims 8-20 as claims 7-19 under the Rule 37 CFR 1.126 and added a new set of claims 20-23 into the application.

Election/Restrictions

2. Applicant's election of species (I) in the reply filed on 9/30/2004 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

As a result of applicant's election, claims 1-17 and 20-23 are examined in this office action and claims 18-19 have been withdrawn from further consideration as being directed to nonelected species.

Drawings

3. The drawing contains corrected figure 3 was received on 4/27/2004. The corrected figure 3 has been approved by the Examiner. However, the drawings contained original figures 1 and 4 are objected by the Examiner for the following reason(s).

Art Unit: 2872

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: The line "2-2" as shown in figure 1 and the numerical references "7" and "13" shown in figure 4 are not mentioned in the specification. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

5. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

6. The disclosure is objected to because of the following informalities: a) The Summary of the Invention is objected to because it does not provide a brief technical description of the invention. Applicant should note that the invention as understood is

Art Unit: 2872

involved to a magnification system disposed inside a body of a microscope (see independent claims 1 and 12); however, such a feature is missing from the Summary of the Invention; b) Page 5, section [0014], line 12 of the section, "includesa" should be changed to –includes a–; c) Page 5, section [0015], line 5 of the section, "straps19" should be changed to –straps 19–. There are still some grammatical and idiomatic errors in the specification. Applicant should carefully proofread the specification. Appropriate correction is required.

Claim Objections

7. Claims 1, 6, 7, 12, and 14 are objected to because of the following informalities. Appropriate correction is required.

a) In claim 1: The arrangement of the lens magnification changer, the hollow elongated body, the oculars and the prism assembly is unclear as provided in the feature thereof "A stereo microscope...said microscope" (lines 1-5) is unclear and misdescriptive of the invention as taught in the specification, in particular, in section [0008]. In other words, the feature "a lens ...and located intermediate the ends of said microscope" (lines 4-5) is unclear. First, it is noted that the features related to the ends of the microscope does not have a proper antecedent basis because the claim recites the ends of the body (see lines 1-2). Second, the specification does not disclose that the lens magnification changer is located in an intermediate position between two ends of the body. The Examiner is of opinion that the feature thereof "a lens magnification changer rotatably mounted about an axis and located intermediate the ends of said microscope" (lines 4-5)

Art Unit: 2872

be changed to --a lens magnification changer rotatably mounted about an axis and located between the ends of said hollow elongated body--.

b) In claim 12, the same problem as set forth in element a) above is also occurred to the claim. Should the feature thereof "a lens magnification changer rotatably mounted about an axis and located intermediate the ends of said microscope" (lines 4-5) be changed to --a lens magnification changer rotatably mounted about an axis and located between the ends of said hollow elongated body--?

Further, in claim 12, a period must be added at the end of the claim.

c) In each of claims 6 and 14, on line 2 of each claim, "LEDs" should be changed to --light emitting diodes--.

d) In claim 7, on line 2, "wall ceiling" should be changed to --wall, ceiling--(see claim 17 on line 2).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muchel et al (U.S. Patent No. 4,518,231) in view of Takizawa et al (U.S. Patent No. 4,396,260).

Muchel et al disclose a stereomicroscope. The stereomicroscope as described in column 3 and shown in fig. 1 comprises a hollow elongated body defined inside the housing (1) for supporting a plurality of optical elements including a variable magnification system (7), a prism assembly (8), lens elements (9) for forming image; prism system (10) for adjusting the interpupillary distance and eyepiece lens system (12). There is also an objective lens system attached to one end of the elongated body for permitting light from an object (3) entering the housing (1). While Muchel et al disclose a variable magnification system (7) having movable lenses, they do not clearly disclose the mechanism for operating the movement of the lens element for the purpose of varying the magnification of the stereomicroscope.

The use of a mechanism in the form of a cylinder tube having bores formed on periphery and extended diametrically through the tube wherein the bores supporting lens elements so that a rotation of the tube will bring different lens combinations into the optical paths of the microscope for the purpose of varying the magnification thereof is known to one skilled in the art as can be seen in the stereomicroscope provided by Takizawa et al. In particular, Takizawa et al disclose a stereomicroscope having a varying magnification mechanism disposed between an objective lens and a prism system for splitting light and teach that the mechanism comprises a rotary member (21) rotated about an axis perpendicular to the light path wherein the rotary member comprises set of bores in which one set of bores supports a set of lens elements. See column 3. When a

rotation of the rotary member is made then either the set of lens elements or a set of aperture is inserted into the light path for the purpose of selection a particular magnification level to the image/light passing therethrough. It is also noted that the use of a light source located near the objective section of the stereomicroscope is also provided by Takizawa et al as can be seen in column 2 and fig. 1. Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the stereomicroscope having a variable magnification system as provided by Muchel et al by utilizing the mechanism having a rotary member supporting a set of lens elements and a set of aperture defined a variable magnification system by the rotation of the rotary member as suggested by Takizawa et al for the purpose of discretely varying the magnification of the stereomicroscope.

10. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Muchel et al in view of Takizawa et al as applied to claim 12 and further of Blaha et al (U.S. Patent No. 4,175,826).

The combined product provided by Muchel et al and Takizawa et al does not suggest a mechanism for pivoting the eyepiece system with respect to the body of the stereomicroscope. However, the use of a microscope having a pivotal eyepiece systems is well known to one skilled in the art as can be seen in the microscope provided by Blaha et al. In particular, Blaha et al disclose a stereomicroscope having a microscope body (1a) and a movable section (1b) supporting an eyepiece system wherein the section supporting the eyepiece

system is able to pivot/rotate with respect to the microscope body (1a) for the purpose of providing different height/dimension of the eyepiece to an observer.

See columns 1-2. Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the system provided by Muchel et al and Takizawa et al by utilizing a pivotal mechanism between the eyepiece section and the main body of the microscope as suggested by Blaha et al for the purpose of pivoting/rotating the eyepiece section with respect to the main body of the microscope for the purpose of providing different heights/dimension suitable to an observer.

11. Claims 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muchel et al in view of Takizawa et al as applied to claim 12 and further in view of Harooni et al (U.S. Patent No. 5,841,509).

The illuminating system as provided in the combined product provided by Muchel et al and Takizawa et al does not contain a light emitting diode, a reflector and a pivotal filter as claimed. However, the use of an illuminating system having such features is known to one skilled in the art as can be seen in the ophthalmoscope provided by Harooni et al. In particular, Harooni et al disclose an ophthalmoscope having an illuminating system and an observation system. The illuminating system as described in columns 3-5 and shown in figure 2 comprises a light emitting diode (145) having a reflector 9185) disposed behind for the purpose of increasing the light amount of the diode toward the front side and a fitter system (155) disposed in the front side of the diode (145). While Harooni et

Art Unit: 2872

al do not clearly state that the filter is pivoting; however, it would have been obvious to one skilled in the art to use a mechanism for pivoting the filter in front of the diode for the purpose of controlling the kind of light/wavelength from the diode to the object to be illuminated. Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the illuminating system provided by Muchel et al and Takizawa et al by using an illuminating system having a diode, a reflector and a filter as suggested by Harooni et al and pivoting the filter for the purpose of controlling the amount of light and the type of light/wavelength to illuminate an object.

12. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Muchel et al in view of Takizawa et al and Harooni et al as applied to claim 15 above, and further in view of Fukaya (U.S. Patent No. 5,420,716).

The combined product as described above does not disclose that it is able to wear by an observer at one end and the other end of the system is attached to a mechanism having adjustable arm and a support mount. However, such a structure is known to one skilled in the art as can be seen in the device having a mounting system for supporting a microscope provided by Fukaya. In particular, in columns 3-4 and shown in fig. 2, the mechanism provided by Fukaya comprises a mounting system having adjustable arm (see also figure 1) for supporting a microscope (1) wherein the microscope is attached to the adjustable arm at one end and attached to a headrest (9) at other end. Thus, it would have been obvious to one skilled in the art at the time the invention was made to utilize

Art Unit: 2872

a mechanism having support mount and adjustable arm as provided by Fukaya for supporting the combined product provided by Muchel et al, Takizawa et al and Harooni et al for the purpose of providing a user means for observation without using his hands and still able to move the system worn by the user to observe different section of the object via the adjustable arm of the support mount.

13. Claims 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Muchel et al in view of Takizawa et al as applied to claim 12 above and further in view of Fogle (U.S. Patent No. 3,434,772).

The combined product provided by Muchel et al and Takizawa et al does not disclose that the optical elements are mounted on a base section located inside an elongated body defined by shells fastened together as claimed. However, such use of shells fastened together for defining an open which is in turn supported a mount having plural optical elements mounted therein is known to one skilled in the art. An example of use a mount supporting a plurality of optical elements which mount is located inside an open defined by shells fastened together is disclosed in columns 2-4 and shown in figures 1-8. Thus, it would have been obvious to one skilled in the art at the time the invention was made to modify the combined product provided by Muchel et al and Takizawa et al by mounting optical elements on a mounting section and then disposed the mounting section inside an open defined by shells fastened together as

Art Unit: 2872

suggested by Fogle for the purpose of proving an easier way to install and remove the optical elements.

Allowable Subject Matter

14. Claims 1-11 and 20-21 are allowed if the claims 1 and 7 are amended to overcome the objections to the claims as set forth in this Office action.

15. The following is a statement of reasons for the indication of allowable subject matter:

The device as claimed in claim 1 is patentable with respect to the cited art, in particular, the U.S. Patent Nos. 4,396,260; 4,195,903; 5,121,220 and 4,277,130 by the limitation related to the structure of the lens magnification changer. While the use of a variable magnification changer having three tubes supporting three lens system able to move for changing the magnification of light passing through each tube is disclosed in the art as can be seen in the Patent 4,277,130 or a mechanism having support for supporting a rotary member supporting three optical systems is disclosed in the Patent 5,121,220; however, the cited art does not disclose a variable magnification changer having three set of bores disposed about the periphery of the changer and each set of bores extends diametrically through the changer as claimed.

Conclusion

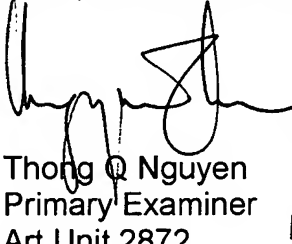
16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Art Unit: 2872

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thong Q Nguyen whose telephone number is (571) 272-2316. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Drew A Dunn can be reached on (571) 272-2312. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Thong Q Nguyen
Primary Examiner
Art Unit 2872
